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Aerospace Medicine

**USAF ACADEMY HAZARD COMMUNICATION
PROGRAM**



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFD 48-1, *Aerospace Medical Program*, and establishes the procedures and responsibilities for the Air Force Occupational Safety and Health (AFOSH) Standard 161-21, *Hazard Communication*. This instruction covers the dissemination of required information and training for Air Force employees. The intent of this instruction is to reduce the incidence of chemically induced occupational illnesses and injuries by informing employees of the hazards associated with, and proper preventive measures to be taken, when using or handling hazardous materials in the workplace. It applies to all Air Force civilian and military personnel whether assigned as permanent party or in transition (TDY). See [Attachment 1](#) for listing of references, abbreviations, acronyms, and terms.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

1. Responsibilities:

1.1. Unit Commanders. Unit Commanders will ensure supervisors and employees who handle, use, or are potentially exposed to hazardous materials in the course of official Air Force duties are provided information and training on the Air Force Hazard Communication Program (AFHCP) and the specific hazards in their work area.

1.2. Supervisors:

1.2.1. Establish and maintain a hazard communication (HAZCOM) binder. It is strongly recommended that the hazardous chemical, associated Material Safety Data Sheet (MSDS), and chemical inventory all correlate to each other. This will make managing the program much easier. Some organizations place a number on the chemical, and that same number is then placed on the MSDS and the chemical inventory. That way, it is easy to tell which chemical goes with which MSDS.

However the supervisor decides to track each chemical is optional as long as some method is used. The binder **must** be set up according to the following tabs:

1.2.1.1. TAB A - A copy of USAFAI 48-101, *USAF Academy Hazard Communication Program instruction*, AFOSH Standard 161-21, *Hazard Communication*, and **your written Hazard Communication Program**. (See [Attachment 2](#))

1.2.1.2. TAB B - Current hazardous material inventory. Facilities with a Chemical Hygiene Plan will file a copy of the plan also at TAB A.

1.2.1.3. TAB C - Maintain a list of nonroutine tasks performed in the work area that involves the use of hazardous materials.

1.2.1.4. TAB D - Maintain a roster of initial HAZCOM training for all assigned personnel. The roster should identify the trainer, date trained, and signatures of personnel trained. Must also keep documentation of supervisor's HAZCOM training, new chemical, and nonroutine task training. Maintain training material (e.g., AFOSH STD 161-21-G and AFOSH STD 161-21-1W) including the approved training outline.

1.2.1.5. TAB E - Maintain correspondence and materials (i.e. state, federal and base (local) regulation changes and updates) that assist in the implementation of the HAZCOM program and a copy of your most current Bioenvironmental Engineering survey letter (if applicable).

1.2.1.6. TAB F - Maintain an MSDS for each potentially hazardous material used or stored in the work area. AF Form 3952, **Chemical/Hazardous Material Request Authorization**, will be maintained for all chemicals as required by the Hazardous Materials Pharmacy (10 ABW/LGLSS). AF Form 3952 will be maintained together with its respective MSDS.

1.2.2. Notify Bioenvironmental Engineering (BE) each time a new chemical is introduced into the work area. Notification shall be made via submission of Air Force Form 3952. This will provide BE an opportunity to evaluate any potential health hazards associated with the chemical and its given use.

1.2.3. Ensure all materials in use and in storage are labeled in accordance with AFOSH Standard 161-21, paragraphs 5d(1) and 5d(3). Work area supervisors will comply with all requirements outlined in AFI 32-7086, *Hazardous Materials Management*.

1.2.4. Keep the AF Form 55, **Employee Safety and Health Record**, in accordance with AFMAN 37-139, *Records Disposition Schedule*, per Table 91-4, Rule 24. Individuals shall hand-carry AF Form 55 to their next assignment when in a PCS or PCA status or in accordance with Table 91-4, Rule 25, destroy after 1 year if the individual is discharged, separates, or retires. Usually the training monitor is responsible to keep this form.

1.2.5. Supervisors, who have never received initial HAZCOM training must notify 710 MDOS/SGPM or the supervisor's squadron training office to schedule supervisor-level training on the AFHCP.

1.3. Bioenvironmental Engineering (710 MDOS/SGPB):

1.3.1. Evaluates health hazards and controls associated with the use of all potentially hazardous materials used on USAFA property regardless of acquisition source.

1.3.2. Works with 10 ABW/LGLSS to ensure the hazardous materials inventory for each work center is kept current.

1.3.3. Advises organizations or individuals concerning labeling of containers. Government owned, contractor operated (GOCO) facilities will receive advice concerning labeling of containers for government furnished hazardous materials.

1.3.4. Provides technical assistance to 710 MDOS/SGPM on conducting the AFHCP supervisor training.

1.3.5. Assists supervisors in developing a hazardous material inventory and HAZCOM program for the work center.

1.3.6. Reviews work area hazardous materials inventories during industrial hygiene surveys.

1.4. Public Health (710 MDOS/SGPM):

1.4.1. Arranges and conducts supervisor and occupational health coordinator (OHC) training on the AFHCP for those supervisors and OHCs not trained by other formal organizational training structures (e.g., maintenance trainers).

1.4.2. Provides technical assistance to the work area supervisor, or other formal organizational training structures, on the AFHCP for employees.

1.4.3. Assists supervisors with the development of work area specific training outlines and programs.

1.5. Contracting (10 ABW/LGC):

1.5.1. Ensures all contracts for which the Air Force locally procures potentially hazardous materials include clause 52.223-3, *Hazard Materials Identification and Material Safety Data*, of the Federal Acquisition Regulation (FAR) 23.303 and 252.223-7001, *Hazard Warning Labels*, of the Defense Federal Acquisition Regulation Supplement (DFARS) 223.302.

1.5.2. During the performance conference, advises contractors of hazardous chemicals used in Air Force operations that they may encounter and the protective measures needed in the normal course of their work on the premises due to AF operations.

1.5.3. Ensures that all contracts comply with OSHA 29 CFR 1910.1200.

1.6. Hazardous Materials Pharmacy (10 ABW/LGLSS):

1.6.1. Maintains a master MSDS file containing all government furnished hazardous materials used at USAFA.

1.6.2. Upon receiving notification of a new chemical from a work center, determines if the Hazardous Materials Information System (HMIS), MSDS, or equivalent information is available. If not, BE assists in an attempt to obtain the MSDS, using established procedures, and determines if the material should be added to the hazardous material inventory.

1.6.3. Obtains MSDSs requested by contractors for Air Force procured hazardous materials through BE.

2. Material Safety Data Sheet (MSDS):

2.1. This master file consists of the HMIS and Occupational Safety and Health (OSHA) Form 174, **Material Safety Data Sheet**, or equivalent forms.

2.1.1. MSDS nonproprietary information is made readily available to all workers at USAFA.

2.1.2. During normal duty hours (0700-1600), workers with questions, or desiring clarification concerning MSDS information, may contact BE for review of the MSDS. BE will review the MSDS with the employee and provide an explanation of the MSDS information. Emergency requests, after normal duty hours, will be directed to the Hospital Emergency Room who will notify BE personnel.

2.2. All new chemicals or products having a new formula or manufacturer not previously evaluated by BE will be evaluated for specific applications and associated hazards. If an MSDS is not available, 10 ABW/LGLSS or BE will assist in an attempt to obtain the MSDS, using established procedures, and determines if the material should be added to the hazardous material inventory.

3. Employee Information and Training:

3.1. Supervisors will receive training using AFOSH Standard 161-21.1G.

3.2. Before workers may handle, store, or use hazardous material, they must be trained using AFOSH Standard 161-21.1W or equivalent 10 AMDS/SGPM approved program containing the elements of the FHCTP. This training may be provided by supervisors, organizational health or safety coordinators, or other formal organizational training structures. Supervisors **must** supplement this training to provide information on chemical hazards specific to the work area. Before presenting supplemental training, the supervisor will ensure the training material has been reviewed by appropriate base agencies (i.e., BE, 710 MDOS/SGPM, Fire Operations (510 CES/CEF), Safety (HQ USAFA/SEG), and Environmental (510 CES/CEV).

4. Hazard Chemical Inventory:

4.1. Each work area supervisor shall ensure that a hazardous material inventory is available for review. The shop's hazardous material inventory shall be maintained in the workplace and accessible to all employees regardless of their duty hours. The workplace supervisor (or designated representative) will update the chemical inventory quarterly, based on the Chemical Authorizations In Shop Sequence and Sequential Tracking Reports provided by 10 ABW/LGLSS and whenever a new or different chemical is introduced into the work area.

4.2. The hazardous material inventory must be maintained in the work area and updated as necessary (this includes satellite work areas). When new chemicals are introduced into the work area, the supervisor will consult with BE to determine if the additional chemicals should be added to the work area's hazardous chemical inventory.

4.3. The hazardous material inventory may be compiled using the Quarterly Bar Code Inventory and/or the Authorization Listing sent out to each shop by 10 ABW/LGLSS. The inventory may also be compiled using the AF Form 2761, **Hazardous Material Data**, or equivalent filed in the BE case file (if applicable).

4.4. The hazardous material inventory will list:

4.4.1. Each potentially hazardous material used in the work area, by name as it appears in the MSDS.

4.4.2. The national stock number, local purchase number, or part number for each hazardous chemical used in the work area.

4.4.3. The manufacturer for each hazardous chemical used in the work area.

4.4.4. The date the actual hazardous material inventory update was performed.

NOTE: If two or more chemicals with the same NSN but different manufacturers are on hand, an MSDS must be available for each chemical.

5. Nonroutine Tasks Involving Hazardous Materials:

5.1. The work area supervisor will list all nonroutine tasks performed in the work area which involves hazardous materials. The supervisor will ensure all work area operating instructions (OI) thoroughly describe nonroutine tasks, associated hazards, and controls for the infrequent tasks performed in the work area. OIs do not need to be prepared if technical orders or other official documents adequately describe these tasks. Supervisors will ensure workers review these procedures before performing the nonroutine tasks.

5.2. When workers temporarily perform duties outside their normal jobs, the supervisor of the activity will ensure these workers receive the following training prior to beginning the activity.

5.2.1. Initial Federal Hazard Communication Training Program (FHCTP) described in paragraph 5e of AFOSH Standard 161-21 for workers not previously trained.

5.2.2. Supplemental training as necessary for task specific chemical hazards and associated controls.

5.3. The supervisor of the activity will forward a memorandum to the worker's formal supervisor describing the training conducted so the individual's AF Form 55 can be updated.

6. Forms Adopted. AF Form 55, **Employee Safety and Health Record**; AF Form 2761, **Hazardous Material Data**; AF Form 3952, **Chemical/Hazardous Material Request Authorization**.

DAVID G. SCHALL, Col, USAF, MC, CFS
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Attachment 1**GLOSSARY OF REFERENCE AND SUPPORTING INFORMATION*****References***

Federal Standard (FED-STD) 313D(1), *Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities*

DOD 6050.5-G-1, *Department of Defense, Federal Hazard Communication Training Program, Trainer's Guide.*

DoD 6050.5-M, *DoD Hazardous Materials Information System Procedures*

DOD 6050.5-W, *Department of Defense, Federal Hazard Communication Training Program, Student's Workbook.*

Air Force Policy Directive 48-1, *Aerospace Medical Program*

AFI 32-7086, *Hazardous Materials Management*

AFI 48-101, *Aerospace Medical Operations*

AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Prevention, and Health (AFOSH) Program.*

AFOSH Standard 161-21, *Hazard Communication.*

OSHA Standard 29 CFR 1910.1200, *Hazard Communication*

Abbreviations and Acronyms

AFHCP —Air Force Hazard Communication Program

AFOSH —Air Force Occupational Safety and Health

AFSC —Air Force Specialty Code

BE —See terms

FHCTP —Federal Hazard Communication Training Program

GOCO —Government Owned, Contractor Operated

HAZCOM —Hazard Communication

HMIS —Hazardous Materials Information System

MSDS —Material Safety Data Sheet

OHC —Occupational Health Coordinator

PCS —Permanent Change of Station

Terms

Bioenvironmental Engineering (BE) —The 710 MDOS/SGPB, Bioenvironmental Engineering, evaluates overall compliance with the AFHCP. BE may be contacted at 333-4825.

Chemical —Any element, chemical compound, or mixture of elements in a solid, liquid, or gaseous form.

Container —Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or other apparatus which may contain a hazardous chemical. For purposes in this instruction, pipes or piping systems, engines, fuel tanks, or other operating systems in a vehicle are not considered to be containers.

Employee —A worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies.

Exposure or Exposed —An employee who is subjected to a hazardous chemical through any route of entry in the course of employment. This also includes any potential exposure.

Hazardous Chemical or Hazardous Material —Any material that is a physical or health hazard as defined in FED-STD 313.

Health Hazard —This includes materials that are carcinogens, toxins, irritants, corrosives, sensitizers, and agents that damage the lungs, skin, eyes, or mucous membranes.

Label —Any written, printed, or graphic material, displayed on or affixed to containers of hazardous materials.

Material Safety Data Sheet —Written or printed concerning a hazardous material which is prepared according to 29 CFR 1910.1200.

Nonroutine Tasks:—

Those tasks included within the work area's normal activities, but performed infrequently; for example, cleaning a solvent tank and changing the solvent, or cleaning up spills.

Temporary duties outside an individual's Air Force Specialty Code (AFSC) or job series.

Workplace —An establishment, job site, or project at one geographical location containing one or more work areas. For this instruction, the workplace can be defined as the smallest organizational unit responsible for a particular operation (usually branch or section level).

Attachment 2**WORKPLACE WRITTEN HAZARD COMMUNICATION PROGRAM**

DEPARTMENT OF THE AIR FORCE

Written Hazard Communication Program

*(organization and shop)**(Date)**(Base and state)*

This written program provides information specific to the implementation of Air Force Occupational Safety and Health (AFOSH) Standard 161-21, **Hazard Communication** (HAZCOM), at the USAF Academy. A copy of this workplace written program must be maintained in each workplace where hazardous materials are used or stored along with all other program elements outlined in USAFAI 48-101, AFOSH Standard 161-21, a work area hazardous chemical inventory, list of the nonroutine tasks involving hazardous materials, HAZCOM training documentation, related correspondence, and all material safety data sheets for each hazardous material used or stored in the work area. Note: The written program should be dated and signed by the section's supervisor.

IMPORTANT PHONE NUMBERS:Fire Department, police, ambulance: 911 (For Emergencies **ONLY**)

Hospital Emergency Room: 333-5000

Hazardous Materials Pharmacy: 333-2651

Bioenvironmental Engineering: 333-4825

Section HAZCOM Monitor: **(Insert phone number here)****1. Material Safety Data Sheets (MSDSs):**

1.1. The Bioenvironmental Engineering Flight (BEF), 710 MDOS/SGPB/Bldg 2355, 333-4825, will provide support on setting up and maintaining HAZCOM program for all hazardous chemicals used at the USAF Academy.

1.2. The base Hazardous Material Pharmacy, 10 ABW/LGLSSDH 333-2651, is responsible to provide copies of all MSDS to workplaces upon request.

1.3. This MSDSs information will be readily available to all workers during all shifts through the Hazardous Materials Pharmacy.

1.4. The section supervisor is responsible to obtain and maintain an MSDS for each chemical product used by the **(Insert shop name here)** shop. BEF will assist as necessary.

1.5. The (**Insert shop name here**) shop supervisor will notify the Hazardous Materials Pharmacy each time a new chemical product is introduced into the work area.

2. Employee Information and Training:

2.1. Unit commanders will ensure supervisors of work areas using hazardous materials receive training using DOD 6050.5-G-1, *Department of Defense "Federal Hazard Communication Training Program (FHCTP), Trainer's Guide,"* and video program, or equivalent HQ AFMOA/SGPA approved program containing the elements of the FHCTP. These supervisors will be trained by Public Health (PH), 710 MDOS/SGPM, Bldg 2355. Call 333-5186 for scheduling.

2.2. Supervisors will ensure subordinate workers are trained on DOD 6050.5-W, *Department of Defense "Federal Hazard Communication Training Program Student's Workbook,"* and video program, or equivalent HQ AFMOS/SGPA approved program containing the elements of the FHCTP, before the workers handle or are occupationally exposed to hazardous materials. The supervisor, the organization occupational health coordinator, or the formal organizational training structure may provide this training. The supervisor should supplement this training to provide information on work area specific chemical hazards. Before presenting supplemental training, the supervisor will ensure BEF/PH has reviewed the information for technical accuracy.

3. Hazardous Chemical Inventory:

3.1. The work supervisor has developed a hazardous chemical inventory for the (**Insert shop name here**) shop. BEF will review this inventory along with the rest of the HAZCOM program during their scheduled (at least once every 24 months) industrial hygiene survey.

3.2. The section supervisor maintains the hazardous chemical inventory in the work area and updates it as necessary. The inventory, MSDS, and hazardous material should all correspond to each other to prevent confusion when trying to match an MSDS to a hazardous material.

3.3. As a minimum, the inventory will include the identity of each hazardous material used in the (**Insert shop name here**) shop, as it appears on the MSDS. The inventory shall also include the date the inventory was completed. Information for the inventory is available through the HAZMAT Pharmacy or may also be compiled from AF Forms 2761, **Hazardous Material Data**, filed in the (Insert shop name here) shop's case file. Proprietary information will not be included on the hazardous chemical inventory.

4. Nonroutine Tasks Involving Hazardous Materials:

4.1. Nonroutine Tasks Are:

4.1.1. Those tasks included within a work area's normal activities but performed infrequently; for example, cleaning a solvent tank and changing the solvent, or cleaning up spills.

4.1.2. Temporary duties outside an individual's normal Air Force Specialty Code (AFSC), or job series.

4.2. The (**Insert shop name here**) shop supervisor will list all nonroutine tasks performed in this work area which involve hazardous materials. The supervisor will ensure work area OIs thoroughly describe nonroutine tasks, associated hazards, and controls for the infrequent tasks performed in this work area. Operating instructions do not need to be prepared if TOs, SOPs, or other official documents adequately

describe these tasks. Supervisors will ensure workers review these procedures before performing the non-routine tasks.

4.3. When workers temporarily perform duties outside their normal jobs, the supervisor of the activity will ensure these workers receive the following training prior to beginning the activity:

4.3.1. The initial Federal Hazard Communications Training Program described in paragraph 5e of AFOSH Standard 161-21 for workers not previously trained.

4.3.2. Supplemental training, as necessary, on work area specific chemical hazardous and associated controls.

4.3.3. The supervisor of the activity will forward a letter to the worker's formal supervisor describing the training conducted so the individual's AF Form 55 can be updated.

Supervisors Signature Block/Date Signed